

Appendix D

Typical Thoroughfare Cross Sections

Cross section requirements for thoroughfares vary according to the capacity and level of service to be provided. Universal standards in the design of thoroughfares are not practical. Each roadway section must be individually analyzed and its cross section determined based on the volume and type of projected traffic, existing capacity, desired level of service, and available right of way. Based on these criteria, recommended typical cross sections are given in Appendix C. These cross sections are typical for facilities on new location and where right of way constraints are not critical. For widening projects and urban projects with limited right of way, special cross sections should be developed that meet the needs of the project.

On all existing and proposed major thoroughfares delineated on the thoroughfare plan, adequate right of way should be protected or acquired for the recommended cross sections. In addition to cross section and right of way recommendations for improvements, Appendix C may recommend ultimate needed right of way for the following situations:

- thoroughfares which may require widening after the current planning period,
- thoroughfares which are borderline adequate and accelerated traffic growth could render them deficient, and
- thoroughfares where an urban curb and gutter cross section may be locally desirable because of urban development or redevelopment.

Recommended design standards relating to grades, sight distances, degree of curve, superelevation, and other considerations for thoroughfares are given in Appendix E. The typical cross sections are described below and are shown in Figure D-1.

A: Four Lanes Divided with Median - Freeway

Cross section "A" is typical for four-lane divided highways in rural areas which may have only partial or no control of access. The minimum median width for this cross section is 46 feet, but a wider median is desirable.

B: Seven Lanes - Curb & Gutter

Cross section "B" is typically not recommended for new projects. When the conditions warrant six lanes, cross section "D" should be recommended. Cross section "B" should be used only in special situations such as when widening from a five-lane section where right of way is limited. Even in these situations, consideration should be given to converting the center turn lane to a median so that cross section "D" is the final cross section.

C: Five Lanes - Curb & Gutter

Typical for major thoroughfares, cross section "C" is desirable where frequent left turns are anticipated as a result of abutting development or frequent street intersections.